



Independent Review

*Transformed Medicaid Statistical Information System Reporting
Enhancement Project Independent Review*

For the
State of Vermont
Agency of Digital Services



**Submitted to the
State of Vermont, Agency of Digital Services
February 11, 2022**

FINAL DRAFT

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1.0 Executive Summary

For all Information Technology (IT) activities over \$1 million, Vermont statute (or at the discretion of the Chief Information Officer [CIO]) requires an Independent Review by the Office of the CIO before the project can begin. The State of Vermont (State) Agency of Digital Services (ADS) engaged Berry Dunn McNeil & Parker, LLC (BerryDunn) to conduct an Independent Review of the ongoing Transformed Medicaid Statistical Information System (T-MSIS) Reporting Enhancement Project. This Independent Review began on December 20, 2021, and the presentation of findings is scheduled for February 17, 2022.

The T-MSIS Reporting Enhancement Project is a project within the State of Vermont's Agency of Human Services (AHS) under the Department of Vermont Health Access (DVHA). DVHA is undertaking this project to comply with the Centers for Medicare & Medicaid Services (CMS) T-MSIS Section 4735 of the Balanced Budget Act of 1997, Section 6504 of the Affordable Care Act, 42 CFR 438.242, 438.604, and 438.818, states must conform to the statutory requirements to report T-MSIS data to CMS. The purpose of these requirements is to help states improve their Medicaid and Children's Health Insurance Program (CHIP) data and data analytics through the Medicaid and CHIP Business Information Solutions (MACBIS) initiative. Required T-MSIS reporting data elements include, but are not limited to:

- Claims data
- Enrollee encounter data
- Provider data
- Supporting information
- Program integrity data
- Program oversight data
- Administration data

In September 2021, DVHA and the T-MSIS vendor agreed to Amendment #7 of Contract #35485B retroactive to August 21, 2021. The Amendment #7 included the T-MSIS Enhancement Reporting Project to help the State's focus on improving data quality and gain additional data elements to support T-MSIS reporting requirements. In January 2022, the State and Gainwell entered into Contract #42868. The new contract further defines the T-MSIS Reporting Enhancement Project and its expectations of the T-MSIS vendor.

While conducting this Independent Review, BerryDunn identified four risks, with two risks being high impact and/or high likelihood of occurrence. These risks are listed in summary form in Section 1.3, and in detail in Attachment 2 – Risk Register.

1.1 Cost Summary

Table 1.1 includes a summary of the costs. More detail can be found in Section 5: Acquisition Cost Assessment and Section 10: Impact Analysis on Net Operating Costs.

Table 0.1: Cost Summary

IT Activity Life Cycle	Cost and Funding Source
Total Life Cycle Costs (Five Years)	\$1,272,569.48
Total Implementation Costs	\$1,272,569.48
New Annual Operating Costs (Five Years)	\$0
Current Annual Operating Costs (Five Years)	\$0
Difference Between Current and New Operating Costs	\$0
Funding Source(s) and Percentage Breakdown of Multiple Sources	90% Federal 10% State

1.2 Disposition of Independent Review Deliverables

Table 1.2 includes a summary of the Independent Review findings as elaborated later in the report.

Table 0.2: Independent Review Deliverables

Deliverable	Highlights From the Independent Review Include Explanations of Any Significant Concerns
Acquisition Cost Assessment	<p>The acquisition costs assessed included only those applicable to technical (implementation) services, ADS project management, ADS security analyst, other ADS labor, other State labor, and this Independent Review. These costs total \$1,272,569.48.</p> <p>Gainwell's contract outlines technical services for the T-MSIS Reporting Enhancement Project, which is unique to the State of Vermont's data quality improvement efforts. Therefore, there are no technical solutions that can be adequately compared to this project's acquisition costs.</p> <p>Instead, BerryDunn conducted research to compare the standard hourly rate for the roles Gainwell has allocated to the T-MSIS Reporting Enhancement Project (e.g., project manager, application developer). Based on our research, the State appears to be paying a comparable price to what other states are potentially paying for similar services.</p>

Deliverable	Highlights From the Independent Review Include Explanations of Any Significant Concerns
Technology Architecture and Standards Review	The nature of the T-MSIS Reporting Enhancement Project is unlike that of a system procurement and implementation project. Since the T-MSIS system is already in place, the project focuses on enhancing the existing Gainwell T-MSIS custom software component to add data elements to the solution based on CMS T-MSIS reporting requirements.
Implementation Plan Assessment	At the time of this Independent Review, the T-MSIS Reporting Enhancement Project did not have a project end date due to the CMS' continuous effort to work with states on improving data quality.
Cost-Benefit Analysis	While the tangible benefits are negligible, BerryDunn's opinion is that the intangible benefits for the State, specifically in the area of compliance, outweigh the one-time costs for implementation.
Analysis of Alternatives	The State is working to improve its Medicaid Enterprise through a series of upcoming RFPs, beginning with the Data Warehouse and followed by the procurement of a modular Medicaid management information system (MMIS). The State might consider assessing alternatives for a new, modernized T-MSIS solution through those procurements.
Impact Analysis on Net Operating Costs	The State will expend one-time costs on implementation and other professional services in Year 1 and 2, with a break-even at Year 3.
Security Assessment	BerryDunn and the ADS Security Office do not have any concerns with compliance to State and federal security requirements.

1.3 Risks Identified as High Impact and/or Having High Likelihood of Occurrence

Table 1.3 provides a summary of each risk, including risk probability, impact, and overall rating. A complete Risk Register is included in Attachment 2.

Table 0.3: Project Risk Summaries and Ratings

Risk ID	Risk Description	Risk Likelihood/Probability	Risk Impact	Overall Risk Rating
1	State staff who worked with T-MSIS have left employment recently, and other State staff who have transitioned in to fill some key roles are	High	High	High

Risk ID	Risk Description	Risk Likelihood/ Probability	Risk Impact	Overall Risk Rating
	new to the project, leaving a potential gap in knowledge transfer. The project could have delays in the timeline/schedule if the State is not able to provide sufficient subject matter expertise during project tasks (e.g., requirements definition, design discussions with Gainwell, testing, etc.). Additionally, it has been identified that some of the State's resources may not be able to devote the necessary time to the T-MSIS project due to competing work priorities.			
2	The State is currently only able to test T-MSIS tables and not actual files, leaving the opportunity for potential T-MSIS errors to not be identified prior to the files being submitted to CMS. The need to address errors after implementation could cause delays in the project timeline/schedule.	High	High	High
3	Existing interoperability/automated interfaces might be affected and not function as expected due to the changes made in T-MSIS to satisfy CMS requirements. Issues with interfaces could result in unplanned time for fixing production errors, subsequently having a potential impact on the project timeline/schedule and downstream processes, such as timely enrollment for Medicaid members.	Low	High	Medium
4	At this time, the T-MSIS project does not have a projected end date. Without a baseline project schedule for the current T-MSIS work, and knowledge of CMS' future requirements for T-MSIS reporting, it is difficult for the State to plan for and allocate resources.	Low	Medium	Medium

1.4 Other Key Issues

The following are the three focal issues currently identified with the T-MSIS Reporting Enhancement Project: 1) Non-compliance with the T-MSIS requirements related to the T-MSIS Top Priority Items (TPIs); 2) delayed submission of the three-year data file to CMS; and 3) the

corrected T-MSIS files continue to be rejected by CMS. Further details on each issue are provided below.

- **Non-Compliance with T-MSIS Requirements**

- There are four outstanding TPIs requiring resolution, two of which are included in the CMS 1-23 category.
- TPI 6 (Completeness and Robustness of Eligibility Group): There are two data quality (DQ) issues remaining for this TPI: DQ10a/b (Realign Federal Beneficiary Aid Category Codes/Enhance Vermont Health Connect (VHC)/MMIS/ACCESS systems category codes) and DQ138a/b (Coding for Deemed Newborns/Coding for Former Foster Care Children). Based on interviews with the State and Gainwell, and a review of the January 12, 2022, T-MSIS Status Report, the master chart of category codes is developed and recommendations for a new hierarchy of aid category codes are forthcoming. The final work product for the aid category codes, which has a target completion date of February 2022, will include three categories of data: the master chart of category codes, a list of outstanding items, and any new codes needed. Requirements gathering for the category code enhancements to the VHC/MMIS/ACCESS systems are targeted to begin in August 2022, with implementation occurring between February and July 2023. The State has identified these as “green” in the most recent T-MSIS Status Report, meaning the work to resolve TPI 6 is on track.
- TPI 16 (Completeness and Consistency of Claim Payment Data Elements): There are two data quality issues remaining for this TPI: DQ27 and DQ29 related to the inability to report on the Accountable Care Organization (ACO) zero paid claims within the T-MSIS data, which are inconsistent with the TPIs. Additionally, an issue was identified where some claims have both ACO and non-ACO attributes, which are causing rejections. Based on the January 18, 2022, interview with Gainwell, much work has been completed on this TPI, as it is designated as the highest priority for the State, and Gainwell is targeting completion with the February T-MSIS file (January data) submission to CMS. The State has identified this TPI as “red” in the January 12, 2022, T-MSIS Status Report due to the major delays in resolving this issue. Additionally, the resolution of this TPI is further delaying the submission of the three-year data submission file to CMS. The State reported its transparency with CMS and its vendors related to the late file submissions, and continued discussions are occurring.
- TPI 30 (Consistency on Crossover Claims): There is one data quality issue remaining for this TPI related to zero paid amounts, and it is in the process of being corrected. Per the interview with Gainwell, they have identified that the target date for the completion of this TPI is also the February T-MSIS file submission of the January data.

- TPI 32 (Beneficiary Demographics: Level 2): There are two data quality issues remaining with this TPI related to immigration status and citizenship. Per the interview with Gainwell, this TPI has been prioritized as low, and there is not a target completion date yet.
- As of the December 29, 2021, CMS reported Vermont as having a blue designation “Number of TPI Categories open = 0-2” for TPIs 1-23 Status (2021 T-MSIS DQ Assessment). Additionally, as of the same date, CMS reported Vermont as a blue designation for TPIs 1-12 status. The “blue” designation is the best rating category given by CMS. Also, CMS is transitioning to another method of assessing data quality for the states called Outcomes-Based Assessment (OBA), in which Vermont exceeds the target for critical priorities and expenditures and is 1% below the target for high-priority items. OBA will have a phased-in approach and is currently being used in tandem with the TPIs.

- **Delayed Submission of the Three-Year Data File to CMS**

The three-year data submission file to CMS is delayed due to the remaining open TPI issues, namely TPI 16 related to the ACO claims. This submission was due to CMS on December 31, 2021. The State has identified TPI 16 as the top priority for resolution, and once the files have been accepted, Gainwell will then submit the three-year data file. Due to the delays in resolving TPI 16 and the 30 days awarded to CMS to review the submitted files, the T-MSIS Analytical Files (TAF) deadline of February 1, 2022, will be missed. The target date is now late February or March 2022.

- **Corrected T-MSIS Files Continue to Be Rejected**

Gainwell is correcting T-MSIS errors for the CMS submission each month; however, the files continue to get rejected with the same or different errors. The State’s project manager is monitoring this challenge to help ensure data quality issues are being reduced. Additionally, the State is working with Gainwell to obtain access to the T-MSIS data, which will be loaded monthly and refreshed annually, to build a user acceptance testing (UAT) environment for the State to test what Gainwell will be submitting in the T-MSIS files. The ability for the State to perform UAT will provide another layer of review prior to files being submitted to CMS, helping to decrease the number of errors returned and preventing files from being rejected.

1.5 Recommendation

The State has completed a lot of work around the mitigation and resolutions of the existing T-MSIS Reporting Enhancement Project risks and issues. The State is managing the risks and issues well, working with Gainwell collaboratively, and is being transparent with CMS to work in partnership with them to resolve the risks and issues. The State continues to progress in its T-MSIS reporting endeavors. Since Gainwell is not tracking risks and issues internally because the project is maintenance and operations (M&O) centric, BerryDunn recommends that the State continue to stay ahead of any challenges for the project.

While the State has closed the staffing risk due to the recent resource additions to the team, BerryDunn recommends it remain an open risk as many of the team members are new to T-MSIS and need to come up the learning curve. This might allow the State to monitor the effectiveness of each resource to help ensure the right resources are in the right roles.

BerryDunn further recommends that the State maintain its open communication with CMS to continue receiving guidance from CMS and Mathematica on open TPIs and upcoming T-MSIS reporting changes.

1.6 Report Acceptance

Independent Reviewer Certification

I certify that this Independent Review Report is an independent and unbiased assessment of the proposed solution's acquisition costs, technical architecture, implementation plan, cost-benefit analysis, and impact on net operating costs, based on the information made available to BerryDunn by the State.



February 18, 2022

Independent Reviewer Signature

Date

1.7 Report Acceptance

The electronic signature below represents the acceptance of this document as the final completed Independent Review Report.

DocuSigned by:

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3/2/2022

State of Vermont Chief Information Officer

Date

2.0 Scope of This Independent Review

2.1 In Scope

The scope of this document is fulfilling the requirements of Vermont Statute, Title 3, Chapter 56, §3303(d).

The Independent Review Report includes:

- An acquisition cost assessment
- A technology architecture review and standards review
- An implementation plan assessment
- A cost analysis and model for benefit analysis
- An analysis of alternatives
- An impact analysis on net operating costs for the agency carrying out the activity
- A security assessment

This Independent Review used the following schedule:

- Weeks of December 20, 2021, and December 27, 2021: Conduct project initiation; review documentation; schedule interviews; develop participation memos
- Weeks of January 3, 2022; January 10, 2022; and January 17, 2022: Conduct interviews with the State and vendor; collect additional information from the State
- Week of January 24, 2022: Conduct additional research; document initial findings
- Week of January 31, 2022: Provide the preliminary Independent Review Report to the State
- Week of February 7, 2022: Collect feedback; update the Independent Review Report; submit the proposed final draft Independent Review Report to the State
- Week of February 14, 2022: Present the Independent Review Report to the CIO; complete any follow-up work and updates to the Independent Review Report; obtain CIO sign-off via the Oversight Project Manager on the Independent Review Report; facilitate the closeout meeting

2.2 Out of Scope

BerryDunn did not evaluate the following areas during this Independent Review:

- Planning for upcoming changes related to CMS' planned T-MSIS OBA is out of scope for this point-in-time independent review. The State confirmed with Mathematica that the

rollout of the T-MSIS OBA process will occur after the public health emergency (PHE) ends.

- Other MMIS modules/services (e.g., financial management, provider management, etc.).
- VHC and ACCESS, which are the systems of record for the Medicaid eligibility data that is sent to the MMIS.

3.0 Sources of Information

3.1 Independent Review Participants

Table 3.1 includes a list of stakeholders who participated in fact-finding meetings and/or communications.

Table 0.1: Independent Review Participants

Name	Organization and Role	Participation Topic(s)
Marie Schonholtz	ADS – Portfolio Manager	Project Kickoff, Project Leadership, Information Technology, Project Financial
Carmen Howe	ADS – Project Manager	Project Kickoff, Project Leadership, Information Technology, Project Management, Vendor Interview
Joseph Liscinsky	DVHA – Project Sponsor	Project Leadership
Walther Ochs	DVHA – Business Lead	Information Technology, Vendor Interview
Amanda Franklin	DVHA – Medicaid Fiscal Analyst	Project Leadership, Project Financial
Kelly Gordon	AHS Project Operations Director	Project Financial, Vendor Interview
Joelle Judge	ADS - Sr. MMIS IT Project Manager	Project Financial
John Gauthier	DVHA – Medicaid Healthcare Data and Statistical Analyst	Information Technology, Vendor Interview
Tony Kramer	DVHA – Medicaid Healthcare Data and Statistical Analyst	Information Technology, Vendor Interview
Emily Wivell	ADS – Security Analyst	Information Technology
Dan Chase	Contractor – Enterprise Architect	Information Technology
Sean Judge	DVHA – IT Lead	Information Technology
Quinn Reid	Gainwell Technologies (Gainwell) – Project Manager	Vendor Interview
Damilola Nkwocha	Gainwell – Business Analyst	Vendor Interview
Eduardo Canava	Gainwell – Developer	Vendor Interview
Michael Inners	Gainwell – Developer	Vendor Interview

Name	Organization and Role	Participation Topic(s)
Scott Friedman	Gainwell – Project Manager	Vendor Interview
Patrick Claussen	Gainwell – Account Manager	Vendor Interview

3.2 Independent Review Documentation

Table 3.2 below includes a list of the documentation utilized to compile this Independent Review.

Table 0.2: Independent Review Documentation

Document Name	Description	Source
T-MSIS Planning for Future Work Meeting Notes	Meeting notes from a State internal meeting held on December 3, 2021	ADS
T-MSIS 7-1-20 to 12-31-20	Report showing actual T-MSIS Enhancements project costs from July through December, 2020	ADS
T-MSIS Biweekly Status Report	Biweekly T-MSIS status report describing the project health, deliverable progress, and status of project risks and issues dated January 12, 2022	ADS
T-MSIS Biweekly Status Report	Biweekly T-MSIS status report describing the project health, deliverable progress, and status of project risks and issues dated December 13, 2021	ADS
T-MSIS Project Plan	Updated T-MSIS project plan dated January 4, 2022	ADS
T-MSIS Project Plan	Initial project plan provided by ADS dated December 28, 2021	ADS
MMIS T-MSIS IT Activity Business Case & Cost (ABC) Analysis Form Worksheet V1.0	State's detailed worksheet that breaks down the T-MSIS project costs for the time frame July 1, 2020, through June 30, 2022	ADS
IT ABC Form	State's business case and cost analysis for the MMIS Interoperability Project dated June 28, 2021	ADS

Document Name	Description	Source
T-MSIS Project Charter	Project Charter dated October 27, 2021	ADS
Project Estimated vs. Known Expenses	Spreadsheet indicating the T-MSIS project estimated vs. known expenses dated December 12, 2021	ADS
Risks and Issue Report – MMIS T-MSIS	Risks and issues report dated December 12, 2021	ADS
Risks and Issue Report – MMIS T-MSIS	Risks and issues report dated January 21, 2022	ADS
T-MSIS Stakeholder Register	Spreadsheet providing a list of the State and vendor T-MSIS project stakeholders	ADS
Contract #35485B Amendment #7	Amendment to the referenced contract, the document is dated September 30, 2021, and includes information on the T-MSIS Reporting Enhancement Project	DVHA website
Contract #42868	New contract with Gainwell that includes the T-MSIS Reporting Enhancement Project	ADS

4.0 Project Information

4.1 Historical Background

Per Section 4735 of the Balanced Budget Act of 1997, Section 6504 of the Affordable Care Act, and 42 CFR 438.242, 438.604, and 438.818, states must conform to the statutory requirements to report T-MSIS data to the CMS. The purpose of these requirements is to help states improve their Medicaid and CHIP data and data analytics through the MACBIS initiative. Required T-MSIS reporting data elements include, but are not limited to:

- Claims data
- Enrollee encounter data
- Provider data
- Supporting information
- Program integrity data
- Program oversight data
- Administration data

CMS continuously works with State Medicaid Agencies (SMAs) to improve data quality and help support improved program and financial management efforts undertaken by SMAs. As part of DVHA's commitment to improve its data quality and adhere to the CMS T-MSIS requirements, the State implemented a T-MSIS reporting system in 2015 using Gainwell's T-MSIS custom software component. According to Gainwell, CMS received the first T-MSIS production file in 2017. CMS has T-MSIS data dating back to October 2015.

Historically, the State has reported T-MSIS data accurately and timely; however, CMS' TPIs continue to evolve. Therefore, the current T-MSIS system requires enhancements to help ensure the State remains in compliance with reporting T-MSIS data. To meet the need for the T-MSIS system's adherence to frequent updates to T-MSIS provisions, via Contract #35485B Amendment #7, the State began the T-MSIS Reporting Enhancement Project to improve its data quality and provide additional T-MSIS data elements. In its latest contract (Contract #42868) with Gainwell, the State further defines the T-MSIS Reporting Enhancement Project and its expectations of the T-MSIS vendor to include:

- Delivery of T-MSIS extracts based on an agreed-upon timeline and consistent with CMS requirements
- Reporting of all managed care encounter and Fee-for-Service (FFS) data and continuous work to make ongoing improvements to data quality completeness
- Helping to ensure all T-MSIS extracts contain all available data and assist with adhering to evolving data element needs based on CMS guidance and rules

- Providing an annual T-MSIS extract improvement plan to address data quality issues
- Meeting biweekly with the State to review open TPIs
- Meeting with CMS and the State monthly

4.2 Project Goals

This section of the report describes the specific business values, business needs, and outcomes that the State identified it expects the T-MSIS vendor to help it achieve through the T-MSIS Reporting Enhancement Project, which includes an ongoing effort to:

- Improve the data quality of T-MSIS data files submitted to CMS monthly based on CMS recommendations and T-MSIS reporting requirements
- Add new T-MSIS data elements to assist the State with adhering to T-MSIS requirements
- Resolve TPI reporting issues
- Improve T-MSIS reporting timeliness

Business Needs

The State needs high-quality T-MSIS data that complies with the CMS T-MSIS provisions, including adding new data elements as CMS T-MSIS stipulations expand. Additionally, the State needs to improve its timeliness for reporting T-MSIS data and to resolve open TPIs.

Business Values

Submission of quality T-MSIS data will help to inform accurate reporting and supporting policies to help provide necessary services to DVHA's members. This might lead to improving standardized data and leveraging it for other projects, such as interoperability projects. More robust data analysis will help DVHA achieve the CMS' T-MSIS goals:

- Improve the quality of care for beneficiaries
- Assess data to improve opportunities for additional policies, services, and enrollment
- Improve program integrity

Outcomes

The State seeks to achieve the following outcomes through the T-MSIS Reporting Enhancement Project:

- Improved data quality
- Compliance with federal T-MSIS reporting requirements

- Improved data reporting and analysis to provide better policies and services for beneficiaries

Benchmarks for Successful Project Completion

The State defines successful progress of the T-MSIS project using these benchmarks:

- The State has resolved the current outstanding TPIs
- The State remains in compliance with T-MSIS reporting requirements
- The T-MSIS extracts are delivered to CMS pursuant to agreed-upon timetables defined in the federal requirements
- The State can show CMS continuous improvement in reporting managed care encounter and FFS claims data
- All T-MSIS data extracts contain all necessary data elements
- The State continues to see and show continuous improvement of data quality
- The T-MSIS system supports additional data elements as CMS T-MSIS reporting requirements advance
- Achieve and maintain meeting OBA T-MSIS targets for T-MSIS reporting

4.3 Project Scope

The T-MSIS Reporting Enhancement Project requires enhancements to Gainwell's T-MSIS custom software component. The project encompasses monthly quality analysis, design, and implementation of improvements to the T-MSIS data. The following lists some T-MSIS data; this list might expand based on evolving CMS requirements and/or recommendations:

- Enhanced information about beneficiary eligibility
- Beneficiary and provider enrollment
- Service utilization
- Claims and managed care data
- Expenditure data for Medicaid and the CHIP

Per the contract between the State and system vendor, Gainwell, all T-MSIS extracts should be delivered on an agreed-upon timeline that is consistent with CMS requirements and contain all available data.

4.4 Major Deliverables

Table 4.1 provides a summary of the deliverables, descriptions, and frequency, as articulated in the contract with Gainwell. The frequency for some deliverables was not finalized at the time of this Independent Review.

Table 4.1: Project Deliverables and Frequency Proposed by the Vendor

Deliverable	Description	Frequency
T-MSIS Extracts	Data extracts required for T-MSIS reporting	Pursuant to an agreed-upon timetable and consistent with federal requirements
T-MSIS Extract Improvement Plan	A plan to address data quality issues that impact the State's annual overall data quality assessment with a goal of moving to and then maintaining a "low concern"	Annual

4.5 Project Phases and Schedule

Table 4.2 is a summary of the project phases/milestones, dates, and tasks planned, as articulated in the draft contract with Gainwell.

Table 4.2: Project Phases/Milestones, Dates, and Tasks

Project Phase/Milestone	Date(s)	Tasks
Resolution of TPI 6	6/28/2023*	Phase 1 Mapping
		Phase 2 Mapping
		Phase 3 Mapping
Resolution of TPI 16	5/4/2022	ACO document created
		Send ACO test data to CMS
		Incorporate fully reviewed ACO reporting changes into PROD process if concurrence is granted
TPI 30	2/22/2022	Identify cause of issue
		Implement fix of summing up details and reporting sum
Resolution of TPI 32	2/17/2022	Identify cause of issue
		Implement fix of summing up details and reporting sum

*Resolution of TPI 6 is included in this report as a milestone because work on resolving this TPI is underway, but not expected to be complete until June 2023.

5.0 Acquisition Cost Assessment

Table 5.1 includes a summary of acquisition costs reported to BerryDunn during this Independent Review.

Table 0.1: Acquisition Cost Assessment

Acquisition Costs	Cost	Comments
Implementation Services	\$830,465.12	Estimated cost based on actual costs for all of fiscal year (FY) 2021, and July 2020 through December 2021, and projected costs for January 2022 through June 2022
Other Contracted Professional Services for Implementation	\$83,298	Contracted staff to support the project (e.g., project coordinator, quality assurance tester), as needed
ADS Enterprise Project Management Oversight (EPMO) Project Oversight	\$0	Project oversight is billed at the MMIS program level
ADS EPMO Project Manager	\$183,040	
ADS EPMO Business Analyst (BA)	\$0	
ADS Enterprise Architect (EA)	\$0	EA resource is under contracted staff above
ADS Security Staff	\$7,040	
ADS IT Labor	\$51,188	IT Developers, IT Manager, IT Lead
Other State Labor	\$93,038.36	DVHA staff supporting the project
Independent Review	\$24,500	Contract amount for BerryDunn's services
Total One-Time Acquisition Costs	\$1,272,569.48	

1. Cost Validation: Describe how you validated the acquisition costs.

BerryDunn validated acquisition costs during documentation review and an interview with ADS' project managers and the State's Gainwell contract manager.

2. Cost Comparison: How do the acquisition costs of the proposed solution compare to what others have paid for similar solutions? Will the State be paying more, less, or about the same?

Gainwell's contract outlines technical services for the T-MSIS Reporting Enhancement Project, which is unique to the State of Vermont's data quality improvement efforts. Therefore, there are no technical solutions that can be adequately compared to this project's acquisition costs.

Instead, BerryDunn conducted research to compare the standard hourly rate for the roles Gainwell has allocated to the T-MSIS Enhancement project (e.g., project manager, application developer).

The State is currently paying \$132 per hour for hours expended on system enhancements, regardless of role. BerryDunn found that states can pay anywhere between \$100 and \$300 per hour, on average.

- 3. Cost Assessment:** Are the acquisition costs valid and appropriate in your professional opinion? List any concerns or issues with the costs.

As outlined above, the State appears to be paying a comparable price to what other states are potentially paying for similar services.

6.0 Technology Architecture and Standards Review

1. **State's IT Strategic Plan:** Describe how the proposed solution aligns with each of the State's IT Strategic Principles:
 - a. Assess how well the technology solution aligns with the business direction
 - b. Assess how well the technology solution maximizes benefits for the State
 - c. Assess how well the information architecture of the technology solution adheres to the principle of Information is an Asset
 - d. Assess if the technology solution will optimize process
 - e. Assess how well the technology solution supports resilience-driven security

The State currently operates a legacy MMIS, utilizing Gainwell Technologies as its Fiscal Agent. The State is working to improve its Medicaid Enterprise through a series of upcoming requests for proposals (RFPs), beginning with the Data Warehouse followed by the procurement of a modular MMIS. In 2016, CMS began by issuing guidance for states to begin steps to modernize their MMIS systems, moving to a modular approach. States are moving at different paces regarding this guidance, and timing is often related to when existing MMIS contracts end and other strategic plans. For Vermont, the existing core Gainwell contract ends December 31, 2026, and would allow for two additional one-year amendments, potentially extending the contract to December 31, 2028, if both amendments are utilized.

Related to T-MSIS, the State is meeting all but a few data requirements with its existing MMIS. Based on discussions with both the State and Gainwell, the outstanding TPIs have a target completion date into 2023 using the current system. The State and Gainwell have worked collaboratively to achieve the "blue" T-MSIS rating from CMS as of December 29, 2021, which indicates that the State has zero to two TPIs open in the TPIs 1-23 category. Additionally, CMS is transitioning to another method of status reporting for T-MSIS called OBA. If OBA were in place today, Vermont exceeds the target for critical priorities and expenditures and is 1% below the target for high-priority items. With the upcoming correction to two of the TPIs, Vermont stands to exceed soon in the high-priority category as well.

With the State's plan to procure and implement the new Data Warehouse ahead of the modular MMIS, it is possible that any issue related to missing T-MSIS data elements (now or in future requirements) may not be corrected through the updated Data Warehouse. These missing data elements might not be corrected until the implementation of a modernized eligibility and enrollment (E&E) system.

2. **Sustainability:** Comment on the sustainability of the solution's technical architecture (i.e., is it sustainable?).

The technical approach is to modify the current MMIS, so BerryDunn assumes the State determined that the system is sustainable as a short-term solution in order to meet T-MSIS

reporting requirements. The sustainability of the MMIS may change based on future federal and State requirements that are unknown at the time of this Independent Review.

3. How does the solution comply with the ADS Strategic Goals enumerated in the [ADS Strategic Plan of January 2021](#)?

Based on BerryDunn's assessment, Gainwell's proposed solution aligns with the following ADS strategic goals:

- Goal 1: IT Modernization – Discover, retire, and replace legacy IT systems with integrated enterprise platforms such as Salesforce and OnBase, thereby reducing technical debt.
- Goal 1: IT Modernization – To identify and remove barriers to the coordination, acquisition, operations, and maintenance of modern IT systems.
- Goal 4: IT Budget Reporting – Ensure alignment of all IT Projects with their funding and the State IT Budget.

4. Compliance with the Section 508 Amendment to the Rehabilitation Act of 1973, as amended in 1998: Comment on the solution's compliance with accessibility standards as outlined in this amendment. Reference: <http://www.section508.gov/content/learn>.

Gainwell is required within the contract to employ, and comply with, multiple industry testing standards, including the Americans with Disabilities Act, Section 508.

5. Disaster Recovery: What is your assessment of the proposed solution's disaster recovery plan? Do you think it is adequate? How might it be improved? Are there specific actions that you would recommend improving the plan?

The contract with Gainwell includes disaster recovery and business continuity obligations, including the development of a Business Continuity and Disaster Recovery Plan to include details, such as policies and procedures for testing and backing up data, resources, hardware and software, network telecommunications, recovery, etc. There are no specific requirements related to T-MSIS disaster recovery; however, T-MSIS data recovery would be covered under the umbrella of the established MMIS Business Continuity and Disaster Recovery Plan to restore operations. Disaster recovery and continuity requirements are in Exhibit 1 of the contract under Section vi – *Data Services Technical Non-Functional*.

6. Data Retention: Describe the relevant data retention needs and how they will be satisfied for or by the proposed solution.

The State's contract with Gainwell outlines data retention requirements, including Gainwell's responsibility related to retaining paper claims and documentation, electronic documentation and artifacts, and record retention for auditing purposes. Within Attachment F – *Agency of Human Services' Customary Contract / Grant Provisions*, specific language exists related to the inspection and retention of records for Medicaid program parties. This contract language applies to any party providing services paid for under Vermont's Medicaid program or Global

Commitment to Health Waiver. Under this contract language, Gainwell is required to retain records, financial data, contracts, computer, and other electronic systems relating to the performance of services under Vermont's Medicaid program for a period of 10 years, as identified by 42 CFR 438.3(u).

- 7. Service Level Agreements (SLAs):** What are the post-implementation services and service levels required by the State? Is the vendor-proposed SLA adequate to meet these needs, in your judgment?

Exhibit 2 of the Gainwell contract identifies one SLA specific to T-MSIS (SLA #37). This SLA outlines the target for T-MSIS system changes is all (100%) monthly, and annual T-MSIS reports sent to CMS are correct as designed and based on available data. The State will receive a \$1,000/month credit when the target is not met. Based on the interviews for this Independent Review, a penalty to Gainwell has not been assessed to date for T-MSIS, due to the contract exception that "this SLA does not directly relate to CMS assessment via TPIs or other reporting; lack of compliance with a TPI does not, by itself, constitute a missed SLA." Per conversations with both the State and Gainwell, the outstanding items are collaboratively prioritized and being remediated according to agreed-upon schedules. Additionally, the State shares and openly discusses the prioritization of items and target schedules with CMS.

- 8. System Integration:** Is the data export reporting capability of the proposed solution consumable by the State? What data is exchanged, and what systems (State and non-State) will the solution integrate/interface with?

As outlined by CMS, the T-MSIS data set includes the following:

- Data regarding beneficiary eligibility and enrollment
- Provider data, including provider participation, qualifications, and affiliations
- Service utilization and cost data
- Claims data, including Managed Care
- Plan-level participation data for service delivery networks and Managed Care
- Financial data, such as primary payments and third-party liability payments (e.g., insurance carrier data) for Medicaid and CHIP beneficiaries

The suite of T-MSIS data is captured within eight file types:

- Inpatient Claims (IP)
- Long-Term Care (LTC) Claims
- Pharmacy (RX) Claims
- Other (OT) Claims

- Eligibility (EL)
- Provider (PRV)
- Managed Care (MCR)
- Third-Party Liability (TPL)

The T-MSIS data exchanged between the State, or its designee, and CMS is contained within the Data Dictionary provided by CMS. The Data Dictionary provides specific information to allow the State to map data contained within the MMIS to the required fields identified for the T-MSIS file record layout. Allowable data values, field length, and special field characteristics or instructions are also provided. Additionally, information to assist the State in submitting the monthly files is included.

For T-MSIS data and/or file issues, Gainwell has described the following approach to design, development, and implementation (DDI) for system fixes.

- When a T-MSIS issue is identified, the Gainwell application developer designs a solution for the problem. The developer discusses the solution approach with one or more Gainwell team members working on the Vermont T-MSIS team. This collaboration helps to ensure the proposed solution will resolve the identified issue.
- Once the team above determines the proposed solution should solve the identified problem, the application developer will create the proposed solution or situation needed to remedy the problem. T-MSIS output files will be generated and reviewed by both the Gainwell Vermont T-MSIS team and the State. If the output files pass a visual inspection, then the files are submitted to the CMS test system to help ensure the data quality is improved and not degraded.
- Once the solution passes testing, Gainwell implements the solution or “fix” into the T-MSIS production file generation to be picked up in the next monthly file submission.

The T-MSIS data is extracted from the mapped fields within the MMIS and stored in Gainwell’s Vermont T-MSIS Database. Systems that interface with the Vermont MMIS include VHC, the eligibility system (ACCESS), the Pharmacy Benefits Manager (PBM), and the Provider Manager Module (PMM). Validation points occur throughout the Gainwell T-MSIS submission process and once any issues are resolved, the file is submitted to CMS via a Secure File Transfer Protocol (SFTP) and loaded into its Data Quality site. At the Data Quality Site, the T-MSIS files go through Mathematica data checks, and a determination is made as to whether the files are accepted or rejected by CMS. Rejected files need to have issues resolved and resubmitted through the designated process. If accepted, the T-MSIS data enters the National T-MSIS Database, where Data Quality reports are generated and then copied into the TAF via the TAF extract, transform, and load (ETL) process. The MACBIS app on the CMS Enterprise Portal will provide T-MSIS options for the State and its designee, including the Operational Dashboard, the Data Quality Tool, and the Operational Dashboard – State File Testing.

7.0 Assessment of Implementation Plan

1. The reality of the implementation timetable.

The nature of the T-MSIS Reporting Enhancement Project is unlike that of a system implementation project. Since the T-MSIS system is already in place, the project focuses on enhancing the existing Gainwell T-MSIS custom software component to add data elements to the solution based on CMS T-MSIS reporting requirements. The halting of the project timetable has occurred several times to accommodate higher priority projects or project stakeholders' staffing changes. Table 7.1 shows the timeline identified by the project team to resolve the four currently outstanding TPIs.

Table 7.1: Planned TPI Resolution Dates

TPI	Description	Planned Resolution Date
TPI 16	This TPI focuses on ACOs.	January 2022 for the February 2022 T-MSIS submission
TPI 30	This TPI focuses on zero amounts paid.	January 2022 for the February 2022 T-MSIS submission
TPI 6	This is an Eligibility TPI related to children, pregnant women, and distinct eligibility groups.	The resolution date for this TPI is sometime in 2023. Resolution of this data is dependent on the State refining its eligibility groups. This is a long-term project that will extend into 2023
TPI 32	This TPI focuses on immigration status. This is the lowest priority TPI.	The resolution date: To be determined (TBD)

As mentioned earlier in this report, the State meets regularly with CMS to discuss the outstanding TPIs and competing priorities. CMS seems supportive of the State's efforts and the approach to resolving the TPIs and is understanding of the State's higher priority projects. As long as the State continues to communicate openly with CMS regarding its endeavors to resolve the open TPIs, the project timeline and TPI prioritization are realistic. Additional changes to the T-MSIS reporting specifications and stability of staff assigned to the T-MSIS Reporting Enhancement Project on both the State and Gainwell's teams are factors that could affect the timeline.

2. Readiness of impacted divisions/departments to participate in this solution/project (consider current culture, staff buy-in, organizational changes needed, and leadership readiness).

The State has begun to address its resource needs by filling recently vacated roles on the T-MSIS Reporting Enhancement Project. The current team has affirmed its commitment to the project. Since the T-MSIS enhancements do not greatly affect the State's daily operations, there is minimal need for change management.

3. Do the milestones and deliverables proposed by the vendor provide enough detail to hold the vendor accountable for meeting the business needs in these areas?

a. Project Management

The State expressed that there may be resource constraints on Gainwell's team, including with the project manager. These constraints might be affecting the oversight of the day-to-day project activities. Gainwell might benefit from adding a resource who could be more involved in making sure the project tasks assigned to Gainwell are completed timely. While this is not immediately impacting the project, the State might consider monitoring Gainwell's project management resource allocation.

The project deliverables are adequate to meet the goals of the project.

b. Training

c. At the time of this Independent Review, BerryDunn did not identify training needs related to the T-MSIS Reporting Enhancement Project. **Testing**

Gainwell's application developer performs testing. One or more members of the Gainwell Vermont T-MSIS team and the State review output files as part of the testing process. If the output files pass a visual scrutiny, the files are submitted to the CMS test system to make sure they improve and do not degrade the data quality measures.

Currently, the State is only able to test the T-MSIS tables and not the T-MSIS files to determine if there might be errors in the T-MSIS data prior to CMS receiving the files. For more information, see Risk #3 in the Risk Register at the end of this report.

d. Design

Gainwell's T-MSIS custom software component used in Vermont exists in DB2. Gainwell stated it has a common solution used in other states, but the existing solution in Vermont only uses the parts of the solution that utilize DB2 rather than the Oracle solution. To help speed the Vermont T-MSIS enhancements up, the Gainwell team can look at the Oracle code to help inform changes in the DB2 T-MSIS system. When needed, the Gainwell team seeks assistance on design challenges from its internal peers who work with other states. The Gainwell team attends an internal monthly technical meeting to exchange knowledge with teams working with other states.

The approach to the T-MSIS enhancements design includes Gainwell's application developer—who is external to the Gainwell VT T-MSIS team—designing a solution for a specific work item. The developer then educates one or more of the Gainwell VT T-MSIS team members on the solution approach to assure the approach will solve the problem that needs to be addressed.

e. Conversion (If Applicable)

Because the T-MSIS Reporting Enhancement Project is not an implementation project, conversion is not required to achieve the project goals.

f. Implementation Planning

Because the T-MSIS Reporting Enhancement Project is dependent on changing federal regulations, this project does not have an end date. As a result, the State is challenged with resource planning, the inability to predict future new reporting requirements, and being able to set a firm project schedule. The State is taking an effective approach by dedicating the resources it can to the project and prioritizing the outstanding TPIs in alignment with other initiatives. See Risk #4 of the Risk Register at the end of this report for more information.

g. Implementation

Since the T-MSIS Reporting Enhancement Project focuses on updating the existing system, the State is working on implementing system fixes to address the outstanding TPIs. The State is taking appropriate actions in prioritizing TPIs and communicating consistently with CMS and Gainwell to resolve the outstanding TPIs. Vermont's challenges with T-MSIS reporting are not unique.

4. Does the State have a resource lined up to be the project manager on the project? If so, does this person possess the skills and experience to be successful in this role, in your judgment? Please explain.

The State has a project manager allocated to the project at 50%. The project manager is new to the project; they joined the T-MSIS team approximately seven months prior to the writing of this report. The project manager is working to understand the T-MSIS requirements and build a baseline project schedule. The project manager is achieving success by helping the T-MSIS Reporting Enhancement Project gain momentum despite the lack of knowledge transfer from the previous project manager. The project manager now has support from resources dedicated to the project that might help with the management of the T-MSIS efforts. The project manager has the necessary project management skills and can manage risks and related mitigation strategies well.

8.0 Cost Analysis and Model for Benefit Analysis

- 1. Analysis Description:** Provide a narrative summary of the cost-benefit analysis conducted. Be sure to indicate how the costs were independently validated.

BerryDunn evaluated the costs provided by the State in the IT ABC Form and financial information provided by the DVHA business office. These costs were verified in an interview with the State.

BerryDunn discussed the benefits of the T-MSIS during interviews with the State and vendor and are incorporated in this report.

- 2. Assumptions:** List any assumptions made in your analysis.

The cost-benefit analysis was performed using the following assumptions:

- All payments to Gainwell will be made in state FY 2021 and FY 2022.
- There is a five-year life cycle, with implementation activities beginning in June 2020 and ending at the end of June 2022.
- There is not an increase in costs for Gainwell to maintain and operate the T-MSIS since it is a component to the MMIS.

- 3. Funding:** Provide the funding source(s). If multiple sources, indicate the percentage of each source for both acquisition costs and ongoing operational costs over the duration of the system/service life cycle.

DVHA will use 90% federal funds and 10% State funds for implementation costs.

- 4. Tangible Costs and Benefits:** Provide a list and description of the tangible costs and benefits of this project. It is “tangible” if it has a direct impact on implementation or operating costs (an increase = a tangible cost, and a decrease = a tangible benefit). The cost of software licenses is an example of a tangible cost. Projected annual operating cost savings is an example of a tangible benefit.

Tangible Costs

- **Implementation Services** – A one-time cost of \$830,465.12
- **Other Contracted Professional Services for Implementation** – Contracted staff to support the implementation total \$83,298
- **ADS EPMO Project Management, Security Analyst, Other ADS Labor and Other State Labor** – These one-time costs total \$334,306.36

Tangible Benefits

Based on interviews with the State, there does not appear to be tangible benefits resulting from this project. If there are any cost savings, they are likely negligible.

- 5. Intangible Costs and Benefits:** Provide a list and descriptions of the intangible costs and benefits. It is “intangible” if it has a positive or negative impact but is not cost related. Examples: Customer service is expected to improve (intangible benefit) or employee morale is expected to decline (intangible cost).

The T-MSIS Reporting Enhancement Project should result in a number of intangible benefits, including:

- Improved data quality of T-MSIS data files submitted to CMS monthly based on CMS recommendations and T-MSIS reporting requirements
 - Improved timeliness of T-MSIS reporting
 - Achieved compliance with federal T-MSIS reporting requirements
 - Improved data reporting and analysis to provide better policies and services for beneficiaries
- 6. Costs vs. Benefits:** Do the benefits of this project (consider both tangible and intangible) outweigh the costs in your opinion? Please elaborate on your response.

While the tangible benefits appear negligible, BerryDunn’s opinion is that the intangible benefits for the State outweigh the one-time costs for implementation.

- 7. IT ABC Form Review:** Review the IT ABC Form (Business Case/Cost Analysis) created by the Business for this project. Is the information consistent with your Independent Review and analysis? If not, please describe. Is the life cycle that was used appropriate for the technology being proposed? If not, please explain.

The approved IT ABC Form reflects an estimated amount of \$1,483,040 for vendor implementation costs. BerryDunn worked with the State to determine an approach for estimating a more accurate one-time cost for our Independent Review analysis. We used the actual costs invoiced by Gainwell from July 2020 to December 2021 and an average monthly estimated cost—based on actual costs incurred from July 2021 to December 2021—for the remaining six months of the project.

Although there is a difference of approximately \$652,628 between the estimated cost in the approved IT ABC Form and our estimated cost in this report, we do not see a need for any updates to the IT ABC Form at this time, since it is likely that the actual cost for the project will be less than the estimated costs in the IT ABC Form.

9.0 Analysis of Alternatives

- 1. Provide a brief analysis of alternative solutions that were deemed financially unfeasible.**
- 2. Provide a brief analysis of alternative technical solutions that were deemed unsustainable.**
- 3. Provide a brief analysis of alternative technical solutions where the costs for operations and maintenance were unfeasible.**

Based on our review of previous contracts/amendments, DVHA has been working with Gainwell—previously known as DXC Technology Services—since 2017 on T-MSIS reporting enhancement efforts. Continuous T-MSIS data quality and reporting enhancement efforts are not uncommon for SMAs, given the need for states to make changes to their systems to meet new and/or revised requirements issued by CMS.

Gainwell mentioned that its project team did evaluate the option of leveraging and reusing its T-MSIS custom software component used in other states; however, it was determined that it is only compatible with an Oracle database and not DB2, which is used with Vermont's solution.

The State is working to improve its Medicaid Enterprise through a series of upcoming RFPs, beginning with the Data Warehouse followed by the procurement of a modular MMIS. BerryDunn believes that the State should assess alternatives for a new, modernized T-MSIS solution through those procurements.

10.0 Impact on Analysis of Net Operating Costs

1. Insert a table to illustrate the Net Operating Cost Impact.

Table 10.1, on the following page, illustrates the impact on net operating costs.

Table 10.1: Life Cycle Costs by FY

Impact on Operating Costs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Totals
Professional Services (Non-Software Costs)						
Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Projected Costs	\$407,271.17	\$447,693.95	\$0	\$0	\$0	\$854,965.17
Maintenance and Support Costs						
Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Projected Costs	\$0	\$0	\$0	\$0	\$0	\$0
Other Costs (State Labor)						
Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Projected Costs	\$208,802.18	\$208,802.18	\$0	\$0	\$0	\$417,604.36
Baseline Annual Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Baseline Annual Projected Costs	\$616,073.35	\$656,496.13	\$0	\$0	\$0	\$1,272,569.48
Cumulative Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Cumulative Projected Costs	\$616,073.35	\$1,272,569.48	\$1,272,569.48	\$1,272,569.48	\$1,272,569.48	\$1,272,569.48
Net Impact on Professional Services	(\$407,271.17)	(\$447,693.95)	\$0	\$0	\$0	(\$854,965.12)
Net Impact on Maintenance and Support Costs and Other Costs (State Labor)	(\$208,802.18)	(\$208,802.18)	\$0	\$0	\$0	(\$417,604.36)
Net Impact on Operating Costs	(\$616,073.35)	(\$656,496.13)	\$0	\$0	\$0	(\$1,272,569.48)

2. Provide a narrative summary of the analysis conducted and include a list of any assumptions.

The current cost for the T-MSIS is included in MMIS Services and is not broken out as a stand-alone service. It is not possible to extrapolate the current cost for the T-MSIS, and BerryDunn assumes that there are no additional ongoing costs for the T-MSIS at the end of this project.

BerryDunn used the following costs and calculations in performing the impact analysis on net operating costs:

- The projected costs for Professional Services in FY21 include \$382,771.17—the actual amount paid—for Gainwell’s implementation services and \$24,500 for BerryDunn’s Independent Review services
- The projected costs for Professional Services for FY22 include:
 - \$325,293.95 – The actual amount paid from July 2021 through December 2021 for Gainwell’s implementation services
 - \$122,400 – An estimated amount based on an average monthly cost from July 2021 through December 2021 for Gainwell’s implementation services
- The projected costs for Other Costs (State Labor) include:
 - \$83,298 – Other contracted professional services for implementation, which include a pool of resources such as QA tester, EA, and project coordinator
 - \$183,040 – ADS project manager
 - \$7,040 – ADS security analyst
 - \$51,188 – Other ADS IT labor, which includes IT developers
 - \$93,038.35 – Other costs, which includes DVHA staff

3. Explain any net operating increases that will be covered by federal funding. Will this funding cover the entire life cycle? If not, please provide the breakouts by year.

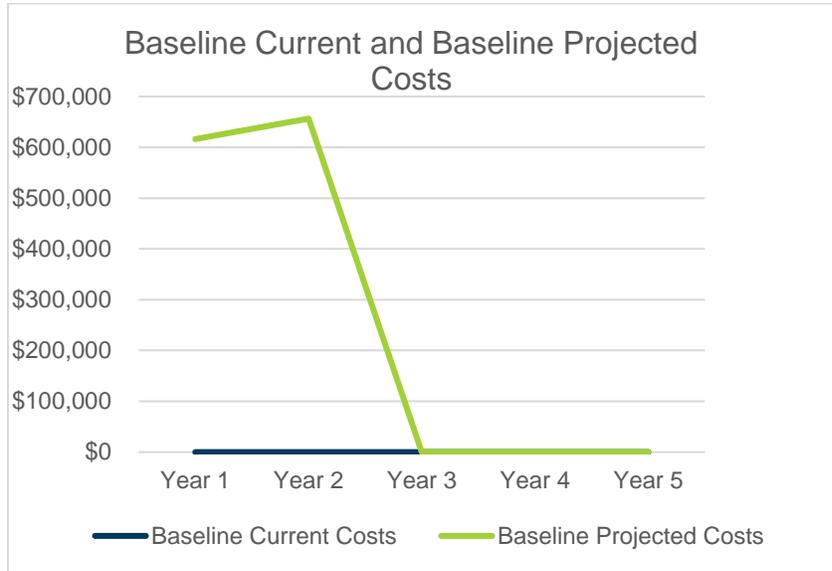
DVHA will use 90% federal funds and 10% State funds for T-MSIS changes required by CMS.

4. What is the break-even point for this IT activity (considering implementation and ongoing operating costs)?

As depicted in Figure 10.1 on the following page, there is a break-even at Year 3. The State will expend most one-time costs on implementation and other professional services in Years 1 and 2. It is important to note that T-MSIS enhancements are likely to continue as CMS changes T-MSIS requirements; however, the scope of this analysis is just for the work

outlined in the IT ABC Form and the State’s project documentation (e.g., project schedule, project charter, etc.) requirements.

Figure 10.1: Baseline Current and Baseline Projected Costs



11.0 Security Assessment

1. Does the system have its own information security controls, rely on the State's controls, or incorporate both?

The MMIS has its own information security controls, managed by Gainwell. For access controls, Gainwell uses multifactor authentication (MFA) and issues credentials to users approved to access specific data or system functions.

2. What method does the system use for data classification?

Gainwell confirmed that the following data types will be securely stored, accessed, and transmitted:

- Publicly Available Information
- Confidential Personally Identifiable Information (PII)
- Protected Health Information
- Medicaid Information

3. What is the vendor's breach notification and incident response process?

Section 6.2 and the Business Associate Agreement (BAA) in the contract outlines all the noticing, reporting, and documenting requirements Gainwell must adhere to for breaches. The Gainwell Vermont Account Security and Privacy Officer (ASPO) is responsible for coordinating and escalating breaches in accordance with State and federal requirements and interacts directly with the State's security officer on all security-related incidents.

4. Does the vendor have a risk management program that specifically addresses information security risks?

Gainwell uses the risk management program in place with its existing Vermont account and Amazon Web Service (AWS).

5. What encryption controls/technologies does the system use to protect data at rest and in transit?

The Gainwell T-MSIS custom software component uses sufficient information security controls for data at rest, data in transit, and access controls:

- For data at rest, Gainwell utilizes an encrypted storage area network (SAN) in its Orlando Data Center (ODC). Gainwell's personal computers are encrypted using Windows BitLocker Device Encryption
- For data in transit, within its network, Gainwell uses a Virtual Private Network (VPN) that is encrypted by default that users must log into to access MMIS data from anywhere within Gainwell. SFTP is used to transfer data from Gainwell to CMS.

6. What format does the vendor use for continuous vulnerability management, what process is used for remediation, and how do they report vulnerabilities to customers?

The State requires Gainwell to run quarterly vulnerability assessments and reports the results to the State. Gainwell is expected to remediate all critical issues within 90 days, all medium issues within 120 days, and all low issues within 180 days. Any exceptions must receive written approval from the State.

12.0 Risk Assessment and Risk Register

This section describes the process for development of a Risk Register, including the following activities:

- A. *Ask the Independent Review participants to provide a list of the risks that they have identified and their strategies for addressing those risks.*
- B. *Independently validate the risk information provided by the State and/or vendor and assess their risk strategies.*
- C. *Identify any additional risks.*
- D. *Ask the Business to respond to your identified risks, as well as provide strategies to address them.*
- E. *Assess the risks strategies provided by the Business for the additional risks you identified.*
- F. *Document all this information in a Risk Register and label it Attachment 2. The Risk Register should include the following:*
 - **Source of Risk:** *Project, Proposed Solution, Vendor, or Other*
 - **Risk Description:** *Provide a description of what the risk entails*
 - **Risk Ratings to Indicate:** *Likelihood and probability of risk occurrence; impact should risk occur; and overall risk rating (high, medium, or low priority)*
 - **State's Planned Risk Strategy:** *Avoid, Mitigate, Transfer, or Accept*
 - **State's Planned Risk Response:** *Describe what the State plans to do (if anything) to address the risk*
 - **Timing of Risk Response:** *Describe the planned timing for carrying out the risk response (e.g., prior to the start of the project, during the Planning Phase, prior to implementation, etc.)*
 - **Reviewer's Assessment of State's Planned Response:** *Indicate if the planned response is adequate/appropriate in your judgment, and if not, what would you recommend?*

Additional Comments on Risks:

The risks identified during this Independent Review can be found in Attachment 2 – Risk Register.

Attachment 1 – Life Cycle Cost-Benefit Analysis

Table A.1 on the following page reflects a five-year life cycle cost analysis for the T-MSIS Reporting Enhancement Project

Table A.1: Life Cycle Analysis

Description	Initial Implementation	Initial Implementation	Maintenance	Maintenance	Maintenance	Total
	FY21	FY22	FY23	FY24	FY25	
Implementation Services	\$382,771.17	\$447,693.95	\$0	\$0	\$0	\$830,465.12
Other Professional Services						
Other Contract Professional Services for Implementation	\$41,649	\$41,649	\$0	\$0	\$0	\$83,298
State Labor Costs						
ADS EPMO Project Oversight	\$0	\$0	\$0	\$0	\$0	\$0
ADS EPMO Project Manager	\$91,520	\$91,520	\$0	\$0	\$0	\$183,040
ADS EPMO BA	\$0	\$0	\$0	\$0	\$0	\$0
ADS EA	\$0	\$0	\$0	\$0	\$0	\$0
ADS Security Staff	\$3,520	\$3,520	\$0	\$0	\$0	\$7,040
Other ADS Labor	\$25,594	\$25,594	\$0	\$0	\$0	\$51,188
Other State Labor	\$46,519.18	\$46,519.18	\$0	\$0	\$0	\$93,038.36
Totals						
Implementation Costs & State Labor Costs	\$591,573.35	\$656,496.13				\$1,248,069.48
BerryDunn IR	\$24,500					\$24,500
Total Implementation	\$616,073.35	\$656,496.13				\$1,272,569.48
Total Life Cycle Operating Costs	\$0	\$0	\$0	\$0	\$0	\$0
Total Life Cycle Costs to be Paid With State Funds	\$61,607.34	\$65,649.61	\$0	\$0	\$0	\$127,256.95

Description	Initial Implementation	Initial Implementation	Maintenance	Maintenance	Maintenance	Total
	FY21	FY22	FY23	FY24	FY25	
Total Life Cycle Costs to be Paid With Federal Funds	\$554,466.01	\$590,846.52	\$0	\$0	\$0	\$1,145,312.53

Attachment 2 – Risk Register

Data Element	Description
Risk #	Sequential number assigned to a risk to be used when referring to the risk.
Risk Probability, Impact, Overall Rating	Two-value indicator of the potential impact of the risk if it were to occur, along with an indicator of the probability of the risk occurring. Assigned values are High, Medium, or Low.
Source of Risk	Source of the risk, which might be interviews with the State, project documentation review, or vendor interview.
Risk Description	Brief narrative description of the identified risk.
State's Planned Risk Strategy	Strategy the State plans to take to address the risk. Assigned values are Avoid, Mitigate, Transfer, or Accept.
State's Planned Risk Response	Risk response the State plans to adopt based on discussions between State staff and BerryDunn reviewers.
Timing of Risk Response	Planned timing for carrying out the risk response, which might be prior to contract execution or subsequent to contract execution.
Reviewer's Assessment of State's Planned Response	Indication of whether BerryDunn reviewers feel the planned response is adequate and appropriate, and recommendations if not.

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
1	High	High	High
Source of Risk: Interview with the State of Vermont, Review of the State's Risk and Issue Log			
Risk Description: State staff who worked with T-MSIS have left employment recently, and other State staff that have transitioned in to fill some key roles are new to the project, leaving a potential gap in knowledge transfer. The project could have delays in the timeline/schedule if the State is not able to provide sufficient subject matter expertise during project tasks (e.g., requirements definition, design discussions with Gainwell, testing, etc.). Additionally, it has been identified that some of the State's resources may not be able to devote the necessary time to the T-MSIS project due to competing work priorities.			
State's Planned Risk Strategy: Mitigate			
State's Planned Risk Response: T-MSIS is an ongoing CMS data quality improvement initiative that does not have an endpoint like a typical project would. Therefore, turnover in staff resources is unavoidable over time. SOV has additional Medicaid expertise to draw upon when a key staff role is vacated, and MMIS Program leadership is involved in transition planning. In this case, DVHA's Data Unit Director transitioned immediately into the T-MSIS business lead role, bringing a deep understanding of Medicaid data. SOV is responsible for keeping Gainwell informed about CMS' high-priority issues and for engaging appropriate subject matter experts when actions are needed such as a policy change to resolve a data issue, or when decisions are needed on data interpretations (such as			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
1	High	High	High
<p>how to count certain data elements). There is an established escalation process to MMIS Program leadership to address staff resource needs, whether due to turnover or the need for additional expertise.</p>			
<p>Timing of Risk Response: The State project team is fully staffed and will be monitored throughout the life of the work as new duties arise for assigned individuals or project team members depart the project.</p>			
<p>Reviewer's Assessment of State's Planned Response: The State responded quickly to the staff departures and other needs of the T-MSIS project by filling the T-MSIS Business Lead position and engaging ADS and the DVHA Data Team to help resolve data issues more expeditiously with Gainwell. Based on the interviews with the State, there are State project staff who are new or new to T-MSIS, which may reveal some gaps in knowledge transfer. The review team agrees with the close, ongoing State monitoring of the resource needs. The State closed this risk.</p>			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
2	High	High	High
<p>Source of Risk: Interview with the State of Vermont, Review of the State's Risk and Issue Log</p>			
<p>Risk Description: The State is currently only able to test T-MSIS tables and not actual files, leaving the opportunity for potential T-MSIS errors to not be identified prior to the files being submitted to CMS. The need to address errors after implementation could cause delays in the project timeline/schedule.</p>			
<p>State's Planned Risk Strategy: Accept</p>			
<p>State's Planned Risk Response: Gainwell keeps the state informed as files pass thru the test and production stages at CMS each month. Gainwell addresses data issues at the test stage and resubmits any updated files to the CMS test database.</p> <p>The T-MSIS files are first submitted to a test server at CMS. Processes on the test server identify potential issues with the data. Any files that have data quality issues can be resubmitted to test before the files are moved to production. So only files that pass quality checks and monitoring on the test server are promoted and any files with issues identified are fixed and resubmitted to the test server before promotion to production.</p> <p>The State has recently started to have Gainwell provide copies of these T-MSIS files to go onto a State hosted data warehouse. This environment enables the state to examine the data and provide input on how data quality issues can be addressed or mitigated.</p>			
<p>Timing of Risk Response: Ongoing throughout the life of the project</p>			
<p>Reviewer's Assessment of State's Planned Response: The State's response to this risk is appropriate and should be commended. Based on this reviewer's experience, some states do not take this additional step of obtaining copies of T-MSIS files and placing them in a test environment to review data quality issues. The ability for the State to examine the data and address or mitigate data quality issues for future file submissions to CMS will help to reduce data errors and file rejections.</p>			

Risk #: 3	Risk Likelihood/Probability: Low	Risk Impact: High	Overall Risk Rating: Medium
Source of Risk: Interview with the State of Vermont, Review of the State's Risk and Issue Log			
Risk Description: Interfaces: Existing interoperability/automated interfaces might be affected and not function as expected due to the changes made in T-MSIS to satisfy CMS requirements. Issues with interfaces could result in unplanned time for fixing production errors, subsequently having a potential impact on the project timeline/schedule and downstream processes, such as timely enrollment for Medicaid members.			
State's Planned Risk Strategy: Accept			
State's Planned Risk Response: Project staff will keep each other informed as interfaces are upgraded and changes are implemented. This is standard with ongoing IT related projects. Resources will be made available to address any unplanned issues that result from the ongoing upgrades and changes. As CMS refines the T-MSIS requirements, changes to the T-MSIS submission will be closely monitored and new issues that arise will be fixed.			
Timing of Risk Response: Immediate with constant monitoring throughout the life of the project			
Reviewer's Assessment of State's Planned Response: The State's response to this risk is appropriate. The review team does not have additional recommendations.			

Risk #: 4	Risk Likelihood/Probability: Low	Risk Impact: Medium	Overall Risk Rating: Medium
Source of Risk: Interview with the State of Vermont, Review of the State's Risk and Issue Log			
Risk Description: At this time, the T-MSIS project does not have a projected end date. Without a baseline project schedule for the current T-MSIS work, and knowledge of CMS' future requirements for T-MSIS reporting, it is difficult for the State to plan for and allocate resources.			
State's Planned Risk Strategy: Accept			
State's Planned Risk Response: SOV is accepting this risk. While T-MSIS follows a project management governance approach, it is not actually a project with a known end date. It is an ongoing CMS data quality improvement initiative. It is not possible to know what CMS' future requirements will be as CMS will continue to identify new issues as current ones are resolved. The T-MSIS team updates the schedule and requirements as they become known, and appropriate resources are identified.			
Timing of Risk Response: Immediate with constant monitoring throughout the life of the project			
Reviewer's Assessment of State's Planned Response: The State's response to this risk is appropriate. Although CMS does not have an end date to T-MSIS, the State is choosing to evaluate the T-MSIS work as a project, allowing for greater control and management. There is a risk of financial penalties for non-compliance with the T-MSIS regulations in the future. Monitoring as a project allows for greater response to CMS and flexibilities to adjust staff and priorities related to ongoing CMS requirements; therefore, increasing opportunities for compliance and reducing the State's risk for incurring financial penalties.			